PRACTICAL PROBLEMS

IN

ARITHMETIC

FOR

FIRST, SECOND AND THIRD CLASSES

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BY

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PREFACE.

THIS little work is intended to aid teachers in furnishing pupils in the Junior Classes of our Public Schools with practical exercise in Arithmetic. The problems are original, and the principal aim has been to make them as practical as possible. With this end in view, many things usually found in works on Arithmetic have been omitted, and problems of a nature such as we often meet in every-day life have been scattered plentifully throughout the work.

J. WHITE.

EDMONTON, *March 31, 1889.*

PRACTICAL PROBLEMS

IN

ARITHMETIC.

FIRST CLASS.

I.

1. There were 241 pages in John's book, 123 in Mary's, and 35 in Ella's. How many pages were there in the three books?

2. In a game of ball, John made 3 runs, James 21, William 41, Thomas 2, and Robbie 32. How many runs did all make?

3. James had 8 marbles, his mother gave him 21, and he bought 30. How many had he then?

4. A boy attended school 15 days in January, 11 days in February, and 21 days in March. How many days did he attend school during the three months?

5. Willie had 5 marbles, and Tom had 4 marbles more than Willie. How many marbles had Tom?

6. Bob had 132 dollars, and Mary had 125 dollars more than Bob. How many dollars had Mary?

7. Jane had 24 hens, and Mary had 13 more than Jane. How many hens had Mary?

8. John costs his father $51 a year for food, $22 for clothes, and $4 for pocket money. How much a year does he cost his father in all?

9. A boy had 118 nuts in one pocket, 11 in a second pocket, and 3 in a third pocket. How many nuts had he?

10. Mary had 4 black hens, and 3 more white ones than black. How many white hens had she? How many hens had she altogether?

11. The school-room is 31 steps long, and 22 steps wide. How many steps would go completely round the room?

12. Tom has 5 cents more than Willie, who has 12 cents. How many cents have both together?

II.

1. A man paid $22 for a suit of clothes, $2 for a hat, $6 for a pair of boots, and $28 for a watch. How much did he pay for all?

2. Four men built a house. The first paid $3,475 on it, the second $7,463, the third $362, and the fourth $2,316. How much did the house cost them?

3. John spent 10 cents on candies, and Robbie spent 8 cents more than John. How many cents did Robbie spend? How many cents did both spend?

4. A man travelled 246 miles by rail, 37 miles by boat, and 18 miles by stage. How far did he travel?

5. In a school there were 21 girls, and 6 more boys than girls. How many pupils were in the school?

6. John bought 6 apples, and Mary bought 3 more than John. How many apples did both buy?

7. In a basket there were 12 blue plums, and 10 more red ones than blue. How many plums were in the basket?

8. A man bought 284 bushels of wheat and 351 barrels of flour in January, and 123 bushels of wheat and 245 barrels of flour in February. How many bushels of wheat, and how many barrels of flour did he buy in the two months?

9. A store-keeper mixed 3 pounds of tea worth $1.20 with 4 pounds worth $1.64. What was the weight and what was the value of all the tea?

10. There are 6 girls in a class, and 4 more boys than girls. How many pupils are there in the class?

11. A man sold 27 sheep for $141 75, and 8 sheep for $32.80. How many sheep did he sell, and how much did he get for all?

12. Tom's coat cost $5, and his pants and vest $3 more than his coat. How many dollars did his whole suit cost?

III.

1. On Monday Ned spelled 27 words, on Tuesday he spelled 14 more than on Monday. How many words did he spell on both days?

2. Annie has 24 cents more than Jane, who has 17 cents. How many cents have both together?

3. Willie gave John 144 cents, and has still 75 cents left. How many cents had he at first?

4. By selling his knife for 75 cents Tom lost 15 cents. What did it cost him?

5. Out of a basket Mary took 124 apples, Jane 135, and there were still 4 in the basket. How many were in it at first?

6. Three men bought a farm. The first paid $2,345, the second $3,142, and the third $755. What did the farm cost?

7. Ella picked 247 plums, and Jane 146 more than Ella. How many plums did both pick?

8. Jane has 6 roses, and 4 more pinks than roses. How many flowers has she?

9. A woman bought 172 eggs, and another woman bought 13 eggs more than the first. How many eggs did both buy?

10. John has 24 cents, Will has 12 cents more than John, and Charles has 7 cents more than Will. How many cents have all?

11. Tom has 5 marbles, Mary has 3 more than Tom, and Ned has 2 more than Mary. How many marbles have all three?

12. There are 7 pupils in the first class, 1 more in the second than in the first, and 2 more in the third than in the second. How many pupils are there in the three classes?

IV.

1. Find the sum of $12.75, $246.48, $24.84, $9.28 and $65.50.

2. Tom gave Mary 10 cents and Ned 3 cents more than Mary. He still has as many left as he gave away. How many cents had he at first?

3. John has 23 marbles, Tom has 7 marbles more than John, and Robbie has as many as both. How many marbles has Robbie? How many marbles have all three?

4 For what must I sell my knife, which cost me 77 cents, so as to gain 23 cents?

5. My horse cost me $87. For what must I sell him so as to gain $25?

6. A man rented a farm for four years. The first year he had 726 bushels of grain, the second year 62 bushels more than the first, the third year 827 bushels, and the fourth year 568 bushels. How many bushels of grain had he in the four years?

7. A boy sold a box of candies. Out of the money he got for it he bought a knife for 25 cents, a top for 15 cents, and had 37 cents left. How many cents did he get for the candies?

8. John's sister gave him 25 cents, his father gave him 10 cents more than his sister, and his mother gave him 24 cents more than his father. How many cents did John get?

9. In a certain orchard there were 45 apples trees, 26 pear trees, and as many plum trees as apple and pear together. How many trees were in the orchard?

10. A woman sold 6 dozen of eggs for 96 cents, and 7 dozen for 105 cents. How many dozen did she sell, and how many cents did she get for them?

11. In a school there were 4 pupils in the fourth class, 10 more in the third than in the fourth, 2 more in the second than in the fourth, and 12 in the first. How many pupils were in the school?

12. Jack having sold Tom 4 oranges, Mary 9, and Fred 8 more than Tom bought, had 1 left in his basket. How many oranges had he at first?

V.

1. A farmer had 12 horses, 6 more cows than horses, and 7 more sheep than the number of cows and horses together. How many animals had he altogether?

2. A man paid $125 for a horse and $47 for a cow. For how much must he sell both to gain $26?

3. Annie picked 17 quarts of berries, Jane 12 quarts, and Bertha 3 quarts more than Jane. How many quarts did the three girls pick?

4. Willie had 17 candies and Thomas 13. Each bought 4 candies. How many had both then?

5. A boy bought 18 pencils for 6 cents and 15 pencils for 5 cents. How many pencils did he buy?

6. Martha has 10 black hens and 15 brown ones. The black hens laid 35 eggs, and the brown ones 37 eggs. How many eggs did her hens lay?

7. Find the sum of $986, $2,785, $894, $9,687, and $2,854.

8. A drover bought 34 sheep for $170, 45 sheep for $315, and 67 sheep for $536. How many sheep did he buy, and how much did they cost him?

9. A person bought a horse, buggy and saddle. The buggy cost $95, the saddle $25, and the horse as much as the buggy and saddle together. How many dollars did the horse cost?

10. The cloth for John's coat cost 248 cents, and the making cost 25 cents more than the cloth. How many cents did his coat cost?

11. Ella paid 25 cents for milk, 33 cents for eggs, 48 cents for butter, 19 cents for apples, and has as much left as she paid away. How many cents had she at first?

12. In a game of ball, one side made 26 runs the first innings, 18 runs the second innings, and 34 runs the third innings. The other side won by 8 runs. How many runs did the second side make?

VI.

1. Tom had 6 marbles, but lost 3 of them. How many had he left?

2. James had 11 rabbits. He sold 3 of them, and 4 died. How many rabbits had he left?

3. One boy had 6 cents, a second boy 8 cents, and a third boy 5 cents. They spent 4 cents for nuts. How many cents had they left?

4. Bob had 128 plums and ate 16 of them. How many plums had he then?

5. Willie had 20 apples and sold 7 of them to James. How many had Willie then?

6. Mary had 21 cents, but lost 5 cents on her way to the store. How many cents can she spend?

7. Willie had 12 cents; he lost 3 cents yesterday and 2 cents to-day. How many cents has he yet?

8. Jane has 221 hens; 7 of them are black and the rest brown. How many brown hens has she?

9. In a school of 46 pupils 27 were boys. How many were girls?

10. James bought a Third Reader for 35 cents. He gave the bookseller a fifty-cent piece. How many cents change should he get back?

11. Will had 42 marbles. He lost 18 of them. How many had he then?

12. In a game of ball one side made 43 runs, and the other side 38. By how many runs did the first side win?

VII.

1. Harry has 7 pencils, Dick has 2 less than Harry, and Tom has 4 more than Harry. How many pencils have all three?

2. Ella had 17 pears. She ate 6 of them and gave away 5. How many has she now?

3. Mary has read 87 pages of her book, which consists of 184 pages. How many has she still to read to finish the book?

4. A girl who had 75 cents paid 25 cents for a slate and 8 cents for a copy. How many cents had she left?

5. In a class of 21 pupils there are 7 girls. How many are boys?

6. A man had $648 and earned $289. He afterwards lost $112 at one time and $123 at another. How many dollars had he left?

7. There are 15 pupils in a class, and 6 of them are girls. How many more boys than girls are there in the class?

8. Ada bought a book for 25 cents, a slate for 12 cents, and a pen for 2 cents. She gave the storekeeper a dollar bill to pay for them. How many cents change should she get back?

9. Mary had 24 apples. She gave Jane 3, Will 2, and ate 4. How many apples had she left?

10. A boy had 100 eggs in two baskets. He broke 17 eggs in one basket and 14 eggs in the other. How many eggs had he then?

11. A boy who had 25 cents earned 34 cents, and then spent 19 cents on candies. How many cents had he then?

12. Three boys had among them 50 cents. The first boy had 7 cents and the second 15 cents. How many cents had the third boy?

VIII.

1. John got 42 merit marks in a week. This was 7 more than Harry got. How many did Harry get?

2. A farmer had 50 animals, consisting of pigs, cows, and horses. There were 24 pigs and 14 cows. How many horses were there?

3. A man spent $128 one day, $72 the next day, and had $149 left. How many dollars had he at first?

4. A boy did 100 *sums* in three days. He did 24 the first day and 25 the second day. How many did he do the third day?

5. A farmer received $6,984 for his farm, and $3,016 for his stock. He spent $1,098 of the money received. How many dollars had he left?

6. A boy had 10,000 candies. He gave 124 of them to other boys and 75 to girls. How many remained for himself?

7. A man had 1,000 sheep and 95 of them died. How many sheep had he then?

8. Three men bought a farm for $8,000. The first man paid $3,475, and the second $2,696. What did the third pay?

9. Harry has 225 cents, Willie has 17 cents more than Harry, and John has 28 cents less than Willie. How many cents has John?

10. A woman had 100 eggs and sold 48 of them. How many must she yet sell so as to have 44 eggs left?

11. A boy bought a slate for 25 cents and a copy for 8 cents. He gave the storekeeper a two-dollar bill to pay for them. How many cents change should he get?

12. Mary has 125 cents, Jane has 12 cents less than Mary, and Nellie has 16 cents less than Mary. How many cents have all?

IX.

1. How many cents shall I have left out of 7,568 cents, after paying for a cow at 3,964 cents, and a sheep at 1,265 cents?

2. A girl had to pay 25 cents for 3 pounds of sugar, 48 cents for a pound of tea, and 24 cents for 6 pounds of rice. She gave a four-dollar bill in payment. How much change should she get back?

3. How much is the sum of 678 and 89 greater than their difference?

4. A farmer who had 214 acres of land bought 69 acres. He afterwards sold 75 acres. How many acres had he left?

5. Tom got 18 cents from his father, and 15 cents from his mother. He lost 6 cents of what his father gave him, and 4 cents of what his mother gave him. How many cents had he left?

6. A girl bought a hat for 75 cents, a pair of boots for 98 cents, and a school-bag for 60 cents. How many cents change will she have left out of 400 cents, after paying for them?

7. Ada had 121 candies. She gave 18 to her sister, 14 to each of her two brothers, and 27 to her aunt. How many had she left for herself?

8. In a flock of 386 sheep and lambs, 228 are sheep. How many more sheep than lambs are there in the flock?

9. John has 55 cents, Robbie 25 cents more than John, and Tom 11 cents less than Robbie. How many cents have all three?

10 There are 80 children in the school, and 35 of them are girls. How many more boys than girls are there in the school?

11. Jane had 62 nuts. She gave 18 to Ella, 14 to Emma, ate 19 herself, and gave the rest to John. How many nuts did John get?

12. Jane gathered 10 flowers, roses and pinks. She had 4 roses. How many more pinks than roses had she?

X.

1. One city has 820,006 people in it, and another has 104,079. How many more people in the one than in the other?

2. A house cost $5,640 and was sold for $7,000. How much was the gain?

3. A man bought a cow for $47 and another for $31. He sold the two together for $100. How much did he gain on them?

4. In a school of 100 pupils, 45 were girls. How many more boys than girls were there?

5. A boy had 75 cents in one pocket, and 57 cents in another. He bought a copy at 10 cents, a book at 25 cents, and a slate at 15 cents. How many cents had he left?

6. How much is the sum of 14 and 6 greater than their difference?

7. On a farm of 200 acres 57 acres were under crop, 38 acres were in pasture, 14 acres were in hay, and 4 acres in garden. The rest was bush. How many acres of bush were there?

8. A man's salary is $678 a year, and he earns $246 for extra work. If his expenses are $579 a year, how much can he save?

9. A man bought 120 acres of land for $6,780. He paid $4,796 in cash and gave his note for the balance. For how much was the note?

10. James had 46 marbles; he won 8 from John, and lost 19 to Dick. How many had he then?

11. One boy has 5,136 cents, and another has 5,204 cents. How many cents has the one more than the other?

12. A owed B $264; in payment he gave $128 in cash and a horse. What was the value of the horse?

XI.

1. Jane had 21 apples, and Ella had 13 pears. Jane gave Ella 7 apples for 4 pears. How many apples and pears had each then?

2. A drover had 41 cows in one field, and 26 in another. He sold 9 out of the first field and 8 out of the second. How many cattle had he left?

3. A boy had 600 cents. He spent 125 cents for books, 468 for a suit of clothes, and the rest for candies. How many cents did he spend for candies?

4. Tom has 37 marbles, Will has 14 marbles more than Tom, and Henry has 16 marbles fewer than Will. How many marbles have the three boys?

5. From the sum of 946 and 2,968 take the difference between 3,912 and 4,021.

6. A man bought 2 pounds of beef at 13 cents a pound, 3 pounds of pork at 9 cents a pound, and 4 pounds of cheese at 16 cents a pound. How much did all cost?

7. Tom has 16 apples, Mary has 7 less than Tom, and Ellen has 8 more than Tom. How many apples have the three?

8. William had 131 nuts. He lost 9 nuts yesterday, and 7 to-day, and ate 37. How many nuts has he yet?

9. Four boys bought 100 oranges; the first boy bought 19 of them, the second 28, and the third 17. How many did the fourth boy buy?

10. A farmer had 100 sheep. He sold 25 of them, and then bought 19. How many sheep has he now?

11. Annie had 19 chickens and 27 hens; Mary had 28 chickens and 16 hens; Martha had 36 chickens and 45 hens. How many chickens, and how many hens had the three girls?

12. Smith has four farms. In the first there are 247 acres, in the second 74 acres more than in the first, in the third 26 acres more than in the second, and 98 acres in the fourth. How many acres of land has Smith?

XII.

1. John had 171 marbles, and his father gave him enough to make 300. How many did his father give him?

2. I lost $17 by selling my horse for $168. How many dollars did he cost me?

3. What is the difference between 76,104 miles and 108,403 miles?

4. A boy had $3 and gave each of his two brothers 25 cents out of it. How many cents had he left?

5. There are 321 oranges, nuts, and eggs in a basket. There are 29 of them oranges and 167 of them nuts. How many eggs are there?

6. A man had $128 and his brother gave him $136. He bought a horse for $97 and a cow for $51. How many dollars had he left?

7. Mr. Jones has $6,079 and Mr. Smith has $7,140. Which has the greater number of dollars? How many greater?

8. Jane was born 8 years ago, and she is now 4 years younger than Mary, who is 2 years older than John. How old is John?

9. How many marbles must I put with 61 so that I may have 140 marbles?

10. Harry and John had each 24 marbles. They played together and Harry won 7 from John. How many had Harry more than John then?

11. I paid as much for my coat as for my pants and vest together. My pants cost $6 and my vest $3. What did my whole suit cost?

12. How much is the difference between 71,642 and 26,807 less than their sum?

SECOND CLASS.

XIII.

1. In a certain orchard there were 37 pear trees, 18 more cherry than pear, 27 more apple than pear and cherry together, and 98 plum trees. How many trees were in the orchard?

2. A farmer having sold 28 sheep to one man, 16 to another, and 24 more than he sold to the first man to a third, had 76 left. How many sheep had he at first?

3. Jane had 19 candies and bought 8, Mary had 7 more than what Jane had after buying, and Ida had as many as Jane and Mary together. How many candies had the three girls?

4. Thomas had 28 cents in one pocket and 16 cents more than this in a second pocket. If he had 28 cents more, how many cents would he have?

5. A man paid $8,946 for a farm, $897 more than this for a mill, and for a house as much as for the farm and mill together. How much did all cost?

6. A farmer sold 647 bushels of wheat, 125 bushels more of barley than wheat, and as many bushels of oats as wheat and barley together. How many bushels of grain did he sell?

7. Three boys divided a basket of apples. The first boy took 19 apples, the second 7 more than the first, the third 3 more than the first and second together, and there were 5 apples left in the basket. How many apples were in the basket at first?

8. A man paid $287 for a horse and $125 more than this for a house. He sold both for $296 more than he paid for them. How many dollars did he get for them?

9. A merchant sold 784 bushels of wheat for $697 on Monday, 1,086 bushels for $984 on Tuesday, and 746 bushels for $865 on Wednesday. How many bushels did he sell on the three days, and how many dollars did he get for all?

10. Jane had 5 hens; the first laid 87 eggs in a year, the second none, the third 16 more than the first, the fourth as many as first and third, and the fifth 76 eggs. How many eggs did all the hens lay?

11. A butcher sold 18 pounds of meat for $2.16, 24 pounds for $3.60, and 38 pounds for $4.18. How much did he get for all he sold?

12. A man gave each of his two sons 76 cents, and each of his two daughters 98 cents. How many cents did he give away?

XIV.

1. Smith's farm is worth $7,864, Jones' is worth $250 more than Smith's, and Allen's is worth $684 less than Jones'. What is the total value of the three farms?

2. John has $57 and James $53, John gives James $25, and James gives John $36. Which has the greater amount now, and how much?

3. The population of a certain county is 21,609, and the population of another county is 33,701. How many more people are there in the one county than in the other?

4. How many dollars must I add to $59,999 to make $60,006?

5. A farmer had 1,024 bushels of grain in one barn, and 896 bushels in another. He sold 765 bushels out of the first barn, 197 bushels out of the second, and required 187 bushels for seed. How many bushels had he still to sell?

6. A man borrowed $7,165 and agreed to pay $429 for the use of it. He repaid $697 at one time, $1,678 at another, and $1,468 at another. How many dollars did he still owe?

7. A drover bought 84 cows for $4,256 and sold 37 of them for $2,348. How many had he left, and for how much must he sell them in order to get back exactly what he paid for the lot?

8. What is the difference between 45 cents and $3?

9. A boy who had 27 cents earned enough to make up 1,000 cents. How many cents did he earn?

10. A dealer in cattle bought 187 head of cattle for $11,407. He sold 96 of them for $5,952. How many had he left, and for how much must he sell them in order to gain $398 on all?

11. A girl bought a cape for 87 cents and a collar for 25 cents. She gave the storekeeper a four-dollar bill in payment. How many cents should she get back?

12. A boy had 200 marbles. He gave John 25, James 74, and Thomas all the rest but 29. How many did Thomas get?

XV.

1. A man earns $3,084 in a year, and spends $877 each half year. How many dollars does he save in a year?

2. What number taken from five thousand will leave 99 for remainder?

3. A man bought a farm for $4,000 and a mill for $3,000. He paid $2,875 cash. How much had he still to pay?

4 A person paid $7,575 for three houses. He paid $1,287 for the first, and $128 more for the second than the first. What did the third house cost?

5. Ella had 21 cents more than Jane, but only 8 more than Berta. How many had Jane less than Berta?

6. A man put 128 sheep into four pens. He put 26 into the first, and 29 each into the second and third pens. How many did he put in the fourth?

7. A buyer of grain gained $1,642 in one week. He lost $987 the next week, and gained $742 the third week. How many dollars did he gain in the three weeks?

8. William has 6 apples more than Thomas, but 5 less than Harry, who has 18. Richard has as many as William and Thomas together. How many apples has Richard?

9. A box contained 231 marbles, red, blue, and white. There were 143 red and blue, and 164 blue and white. How many of each kind were in the box?

10. Harry hoed 16 rows of potatoes less than Thomas, and 9 more than William, who hoed 24. Fred hoed 8 less than Thomas. How many rows did Fred hoe?

11. Three boys, John, Thomas, and Will, have among them 159 marbles. John and Thomas together have 95, and Thomas and Will together have 119. How many has Will more than John?

12. What is the difference between sixty thousand nine hundred and four and 61,001?

XVI.

1. The remainder is 7,390 and the subtrahend 4,869; find the minuend.

2. A man bought four horses for $548. For the first he paid $136, for the second $29 more than for the first, and for the third $38 less than for the second. How much did he pay for the fourth?

3. Tom bought 57 candies, and on his way home he bought 8 times 7 candies. If he ate 6 of them, how many did he take home?

4. William had 26 marbles, John had 22, and Thomas had 17. William gave Thomas enough to make his number up to John's. How many had William less than John then?

5. I sold a horse for $127.69, which was $38 more than he cost me. Find the cost price.

6. Robert had 28 marbles and Herbert had 22. Robert bought 16, and then played with Herbert and lost 12. Which of them had more than the other then, and how many more had he?

7. What is the difference between $9,405 and $9,424?

8. The sum of three numbers is 12,045. The first number is 3,681 and the second is 1,087 more than the first. What is the third number?

9. From the difference between 648 and 1,603, take the difference between 1,836 and 947.

10. A man bought a farm for $7,645. He spent $2,879 in building a house on it, and $657 for a barn. He sold all for $12,000. Did he gain or lose, and how much?

11. John had 25 marbles less than James. James played with John and lost 8 marbles to him; John then played with Henry, who won 5 from him. How many had John less than James then?

12. A boy who had 87 cents earned 36 cents. How many cents must he yet earn so as to have $2?

XVII.

1. How much must I add to the difference between 765 and 1,000 so as to make the sum of 687 and 9,374?

2. A man owed a debt of $3,918. He paid at one time $965, and at another time $2,924. How many dollars had he yet to pay?

3. Find the value of $7,468-4,936-749+6,854-289$.

4. A man paid $15,200 for four houses. For the first he paid $3,846, for the second $168 less than for the first, and for the third $589 more than for the second. How many dollars did he pay for the fourth?

5. How much is the difference between 684 and 4,982 greater than the sum of 368 and 1,059?

6. Jones and Smith start from the same place and travel in the same direction. On the first day Jones goes 38 miles and Smith 29 miles; on the second day Jones goes 32 miles and Smith 34 miles. How many miles are they apart then?

7. A man borrowed $3,687 and promised to pay $345 for the loan. He repaid $798 at one time and $376 at another. How many dollars had he yet to pay?

8. A man bought 368 sheep for $2,428, and 197 sheep for $1,240. He sold 398 of them for $3,167. How many sheep had he left, and how much were they worth?

9. Harry had 128 cents. His mother gave him 67 cents, his sister gave him 39 cents less than his mother gave him, and his father gave him enough to make $5. How many cents did his father give him?

10. John and Thomas start from two places, 128 miles apart, and travel toward each other. The first day John goes 37 miles and Thomas 29 miles; the second day John rests and Thomas goes 18 miles. How far are they apart then?

11. The sum of four numbers is 36,947. The first number is 3,986, the second 4,928, and the third 247 less than the first and second together. What is the fourth?

12. A man bought a horse for $197, a cow for $48, and a sheep for $9. He sold all for $27 less than they cost him. How many dollars did he get for them?

XVIII.

1. How much will 4 books cost at 25 cents each?

2. A boy took 75 cents to town, and bought 6 oranges at 8 cents each. How many cents had he left?

3. Find the cost of 7 bushels of barley at 68 cents per bushel.

4. Tom bought 9 pears at 14 cents each; how many cents had he to pay for them?

5. A person bought 9 cows at 4,768 cents each; he paid 38,898 cents in cash. How many cents had he yet to pay?

6. James bought 8 apples at 7 cents each, and 11 pears at 9 cents each. How many cents did he pay for all?

7. A man bought a pig and 12 sheep for $60. If each sheep cost $4, how much did the pig cost?

8. James bought of John 6 apples at 4 cents each, and John bought of James 5 peaches at 6 cents each. How many cents had John to give James to balance their accounts?

9. Thomas takes 2,547 steps in walking one mile. How many steps does he take in walking 6 miles?

10. A man sold a load of wheat, containing 35 bags of 2 bushels each, at $3 a bushel. How many dollars did he get for the load?

11. A man gave $6,548 for a farm; how much would 8 such farms cost?

12. How many dollars would 4 horses at $97 each, and 5 cows at $37 each, cost?

XIX.

1. A man had 350 yards of cloth. He sold 127 yards to one man and 38 yards to another. How much is the remainder worth at 9 cents a yard?

2. A boy who had 1,500 apples sold 85 dozen and 8. How many had he left?

3. Find the difference between the cost of 8 pounds of tea at 75 cents the pound, and 12 pounds of coffee at 39 cents the pound.

4. A man sold 47 bushels of wheat at $2 per bushel, and 27 tons of hay at $9 per ton. He paid a debt of $298 out of the money he received. How many dollars had he left?

5. How much must I add to the product of 284 and 8 so as to make 3,080?

6. A horse travelled 9 miles a day on 17 days in June, and 7 miles a day on 23 days in July. How much farther did he travel in July than in June?

7. How many acres in 8 farms of 12 fields each, allowing 16 acres in each field?

8. A man who had $200 bought 7 sheep at $4.25 each, and 4 cows at $37 each. How much had he left after paying for the sheep and cows?

9. A man bought 18 bags of oats, each bag containing 3 bushels, at $2 a bushel, and 24 bags of wheat, each bag containing 2 bushels, at $3 a bushel. How much less did he pay for oats than for wheat?

10. A man bought 12 cords of wood at $4.50 a cord, and gave two twenty-dollar bills and two ten-dollar bills in payment. How much change should he receive?

11. A farmer sold 2 cords of wood at $4 a cord, and bought 6 pounds of tea at 75 cents a pound, and 8 pounds of sugar at 9 cents a pound. How much had he left after paying for the tea and sugar?

12. Out of a salary of $1,265 a year, a man paid $192 for board, $328 for clothing, and $379 for other expenses. How much did he save in 9 years?

XX.

1. If a man spend $275 a year for 24 years, how much will he have left out of $7,000?

2. James had 238 cents. His father gave him six times and his mother seven times as much as he had. How much had he then?

3. Charlie hoed 39 rows of potatoes, and Harry hoed 8 less than seven times as many. How many did both hoe?

4. If 34 men do a piece of work in 27 days, how long would it take 1 man to do it?

5. The grain on a farm was worth $689, the stock was worth three times as much as the grain, and the farm itself was worth four times as much as the stock. How much were all worth?

6. A man found three rolls of five-dollar bills. In the first roll there were 26 bills; in the second, 37 bills; and in the third, 29 bills. How much money did he find?

7. A farmer sold 8 bushels of wheat at $1.18 a bushel, and 5 bushels of barley at 77 cents a bushel. How much more did he get for wheat than barley?

8. At 87 cents a bushel, how much more will 28 bushels cost than 19 bushels?

9. A boy who had 300 candies gave his brother 27, and his sister six times as many as he gave his brother. How many had he left?

10. A goes 72 miles and B 67 miles each day. If they travel in opposite directions for 875 days, how far will they be apart? How far if they travel in the same direction?

11. A man bought 36 horses at $137 each, and sold them at $150 each. How much did he gain on the whole?

12. A drover bought 27 pigs at $24 each, and 16 cows at $29 each. How much had he left out of $1,128 after paying for them?

XXI.

1. If a house costs $3,679, how much will 784 such houses cost?

2. A drover bought 56 head of cattle at $57 each. After spending $187 in feeding them, he sold each for $64. Find his total gain on the transaction.

3. A merchant bought 67 yards of cloth at 86 cents a yard. He sold 9 yards to one man, 16 yards to a second, and 28 yards to a third—all at 95 cents a yard; the remainder he sold at 93 cents a yard. How much did he gain on the whole?

4. A man who had 1,000 horses sold 28 of them. What is the value of the remaining horses at $89 each?

5. A merchant bought 675 pieces of cloth, each piece containing 67 yards; he sold 17 pieces. How many yards had he left?

6. In payment for 4 pounds of tea at 78 cents a pound, and 12 yards of cloth at 37 cents a yard, a person gave a ten-dollar bill. How many cents change had he to get?

7. A man gave 16 bushels of oats worth 47 cents a bushel, and money enough to pay for 2 sheep worth $5 each. How much money did he give?

8. A man paid $1.87 on a debt of $100. How much had he still to pay?

9. I bought 75 horses for $4,800, and sold them at $73 each. How much did I gain on all?

10. What is the value of 308 bushels of barley at 75 cents a bushel?

11. A person who had 1,000 yards of cloth sold 593 yards. What is the value of the remainder at 326 cents a yard?

12. If one mile of railway take 248 tons of iron worth $46 a ton, what will be the cost of the iron for a road 56 miles in length?

XXII.

1. Multiply the difference between 80,070 and 70,689 by the sum of 11 and 8.

2. If the soldiers in a certain army consume 6,709 pounds of bread in one day, how many pounds will last them for 2 months of 30 days each?

3. Harry and John travel in opposite directions for 9 days, Harry going 28 miles and John 41 miles each day. How far are they apart?

4. If 34 men build a wall in 98 days, how long would it take 1 man to build two such walls?

5. By how much does the product of 8 and 12 exceed the product of their sum and difference?

6. Make out a bill of the following:—6 lbs. tea, at 68 cents a lb.; 208 lbs. sugar, at 8 cents a lb.; 76 yds. cloth, at 48 cents a yard.

7. A merchant buys 5,070 bushels of oats at 39 cents a bushel, and pays 187,964 cents cash. How much has he yet to pay?

8. A person bought 8 cows at $37 each, and sold them so as to gain $4 on the lot. How much did he get for them?

9. A drover bought 20 pigs at $4 each, and kept them two months at a cost of $1 each. After 3 of them died, he sold the remainder at $6 each. How much did he gain on all?

10. If 8,008 men cut 9,086 cords of wood in 2 days, how long would it take 1 man to cut the same quantity of wood?

11. I paid $165 for 24 sheep, and sold them at $9 each. How much did I gain on all?

12. A man bought a cow and 2 horses for $283. If each horse cost $119, how much did the cow cost?

XXIII.

1. A farmer paid $200 for a horse, cow and pig. The cow cost $47, and the horse three times as much as the cow. How much did the pig cost?

2. How many yards are there in 8 bundles of cloth, each bundle containing 27 pieces, and each piece 48 yards?

3. A boy bought 3 books at 25 cents each, a pair of skates at $1, and 3 pounds of candies at 15 cents a pound. He paid $2 in cash. How much had he yet to pay?

4. How far will a train go in 25 days of 24 hours each, at the rate of 27 miles an hour?

5. If one acre of land costs $7,065, how much will 9,007 acres cost?

6. A woman bought 16 yards of cloth at 28 cents a yard, and she gave in payment 19 pounds of butter at 21 cents a pound, and the balance in cash. How much cash did she give?

7. A drover has 208 cows worth $25 each and 17 sheep worth $7 each. How much more are the cows worth than the sheep?

8. What length of rope will stretch around a field 2,837 yards long and 754 yards wide?

9. One man has $684, and another has 18 times as much as the first, lacking $237. How many dollars have both?

10. A boy sold 39 oranges at 17 cents each and received $6 as payment in part. How much had he yet to get?

11. Mary had $10. She bought four hens at 18 cents each and 9 geese at 68 cents each. How much had she left?

12. I sold 4 yards of cloth at 57 cents a yard and 3 pounds of tea at 78 cents a pound. How much less than $5 did I receive?

XXIV.

1. A store-keeper sold 25 barrels of sugar at $28 a barrel and 4 yards of cloth at 20 cents a yard. How much did he get for them?

2. A farmer sold 57 loads of barley, each load containing 28 bags, and each bag 2 bushels, at 98 cents a bushel. How much money did he receive?

3. What is the product of the sum and difference of 346 and 234?

4. If 304 horses plough 1,216 acres in 6 days, how long would it take one horse to plough it?

5. Off a piece of cloth containing 237 yards, a merchant sold 98 yards. How much is the remainder worth at $3 a yard?

6. Thomas has 268 cents, Robert has 17 times as many as Thomas, and William has as many as Thomas and Robert together. How many cents have all three?

7. A man bought 16 cows at $28 each and 13 cows at $35 each. He sold the whole lot at $32 each. Did he gain or lose on the transaction, and how much?

8. The sum of two numbers is 592 and one of them is 234; find the product of the numbers.

9. A man bought a binder for $145; he cut grain for his neighbors at $38 per week, but paid $4 a week for repairs. At the end of two weeks he sold the machine for $128. Did he gain or did he lose on it? How much?

10. A man owed a debt of $2,347; he paid it by giving 37 sheep at $8 each, 27 cows at $59 each, and the balance in money. How much money did he give?

11. Find the value of the following:—4 dozen of spools at 3 cents each, 36 pounds of tea at 48 cents a pound, 108 yards of cloth at 27 cents a yard, and a cutter at $28.

12. A merchant bought 3,676 bushels of wheat at 86 cents a bushel, and sold it at a gain of 68,475 cents; how much did he get for the wheat?

XXV.

1. James has 468 cents, he earns 138 cents and his father gives him 267 cents. How many cents does he lack of having $100?

2. A drover bought 26 sheep at $6.75 each. He kept them 3 months at a cost of 75 cents a month, and sold them at $9.25 each. Find his entire gain.

3. Two persons started at the same time to travel toward each other, the one walking 28 miles a day and the other 19 miles. After travelling 8 days they met. How many miles were they apart at first?

4. A merchant bought 1,000 bushels of wheat at 85 cents per bushel. He sold 400 bushels of it at 95 cents a bushel, and the remainder at 75 cents a bushel. Did he gain or lose? How much?

5. One man has $648, a second has $349, and a third $876. How much must be added to what they all have so as to make $2,000?

6. Mary had 18 dozen and 8 candies, and Jane had 9 dozen and 9 candies. Which had the greater number? How many greater?

7. Multiply ninety-eight thousand and twenty-seven by nine thousand and six.

8. Smith bought 146 cattle at $37 each and 86 others at $49 each. He sold the whole lot at $45 each. How much was his whole gain or loss?

9. How much is the product of 12 and 20 less than the product of their sum and difference?

10. There are 16 ounces in a pound and 2,000 pounds in a ton. How many ounces are there in four tons?

11. How much is seven times the product of 3,987 and 268?

12. If a house be worth $674, and the farm on which it stands worth $278 less than nine times as much as the house, and the crop worth $67 more than twice as much as the house, how much would the whole be worth?

XXVI.

1. How many apples at 4 cents each can James buy for 72 cents?

2. A boy bought 3 books for 75 cents. How much did each book cost?

3. Thomas bought 4 oranges for 28 cents and 5 pears for 25 cents. How much more did an orange cost than a pear?

4. I divided 84 apples among 7 boys, giving each boy the same number of apples. How many did each boy receive?

5. A web of cloth contains 54 yards. How many dresses of 6 yards each can be made from it?

6. How many apples worth 3 cents each should be given for 12 pears worth 4 cents each?

7. A man has $785 in five-dollar bills. How many bills has he?

8. If 3 pears cost 9 cents, how many pears should be given in exchange for 2 hens worth 24 cents each?

9. Thomas gave John 5 pears worth 12 cents each, and he got in payment apples worth 3 cents each. How many apples did he get?

10. A farmer got 136 bushels of wheat off an eight-acre field. What was the yield per acre?

11. How many times is $6 contained in $216,468?

12. How many sheep worth $9 each should be given for 4 cows worth $27 each?

XXVII.

1. If 4 sheep cost $16, how much more will 9 sheep cost?

2. What sum of money taken 8 times will amount to $5,605,512?

3. Willie bought 8 chickens at 14 cents each, and sold them so as to gain 24 cents on the whole. How many cents did he get for each?

4. How many pairs of stockings worth 9 cents a pair should be given for 3 geese worth 63 cents each?

5. A box contained 1,728 eggs. How many dozen were there in it?

6. A man had 8 yards of cloth worth $32. He gave 5 yards of it for ducks worth 20 cents each. How many ducks did he get?

7. A man who earns $13 a day spends $1 a day for board and $1 for other expenses. How many days will it take him to save $176?

8. How many pounds of sugar at 8 cents a pound can I get for 48,632 cents?

9 The divisor is 7 and the quotient 387. What is the dividend?

10. How many times $9 is $5,922?

11. There are 3 feet in a yard. How many yards is it around a square field, one side of which is 291 feet?

12. A woman has 8 hens and 7 geese, worth 720 cents. The hens are worth 20 cents each. How much is each goose worth?

XXVIII.

1. Two boys had 991 apples, and one of them had 295 apples more than the other. How many had each?

2. If 4 cords of wood cost $16, how much will 9 cords cost?

3 A man bought 4,368 eggs at 15 cents per dozen. How much did they cost him?

4. If 15 men earn $116.10 in a week, how much does each man earn in a day?

5. If 4 men earn $12 in a day, how much would 7 men earn in the same time?

6. A gave 28 tons of hay worth $12 a ton to B for 21 pigs. What was the value of each pig?

7. If 24 cows cost $552, how much would 17 cows cost?

8. James bought apples for 57 cents, and John bought 8 more than James for 81 cents. What was the price of each apple?

9. How many cows worth $28 each should be given for 17 horses worth $112 each?

10. The quotient is 128, the divisor is 643, and the remainder is 47 ; find the dividend.

11. A man had a farm of 70 acres, which yielded 17 bushels of wheat to the acre. He sold one-half of the wheat at $1.25 a bushel and the other half at $2 a bushel. How much money did he get for his wheat?

12. A man has 24 horses and 37 pigs worth $2,392. The horses are worth $75 each. How much is each pig worth?

XXIX.

1. A laborer earns $18 a month and spends $6 of it. In how many months will he save $108?

2. How many cords of wood should be given for 33 sheep worth $6 each, when 4 cords of wood are worth $12 ?

3. If $18,748 be divided into 43 equal parts, what will be the amount of 26 of them ?

4. A farmer bought 67 cows at $48.75 each. He fed them 6 tons of hay worth $12 a ton, and then sold them at $68.25 each. How much did he gain?

5. If 17 men do a piece of work in 12 days, and 24 boys do the same amount of work in 12 days, how many days longer will it take 1 boy than 1 man to do the work?

6. There are 60 minutes in an hour. How far can a man run in 4 hours at the rate of 225 yards a minute?

7. Find the cost of 6 loads of wheat, each load weighing 3,720 pounds, at 97 cents a bushel?

8. Nine men own a farm of 237 acres. They sell it at $63 per acre. How much should each receive?

9. In a certain school-room there were 8rows of single seats, and 75 boys filled all the seats but 5. How many seats were in each row?

10. A farmer sold 4 loads of wheat, each load containing 42 bushels, at 98 cents a bushel, and with the money received he bought a cutter at $28, a cow at $56, and 6 cords of wood at $4.25 a cord. How much money had he left?

11. A boy who has 75 apples gives 9 to each one in his class and keeps the smallest share for himself. How many were in the class?

12. At the rate of 4 miles an hour for 9 hours a day, how many days would a man take to walk 288 miles?

XXX.

1. Harry has 120 nuts, William has half as many as Harry, and James one-fourth as many as William. How many nuts have all three boys?

2. If a man earns 75 cents and a boy 11 cents a day, how many days will it take both to earn 18,748 cents?

3. A grocer bought a quantity of tea for $226.20, and sold it for $281.88, gaining thereby 16 cents a pound. How many pounds did he buy?

4. A boat carried 34,615 passengers, taking 86 passengers every trip but the last one. How many did it take the last trip?

5. A person sold 648 sheep at $14 each, and bought a cow with $72 of the money received. How many horses, costing $180 each, can he buy with the remainder of the money?

6. If a horse eats 2 gallons of oats in a day, and there are 8 gallons in a bushel, how many bushels will he eat in 24 weeks?

7. A man bought a quantity of wheat at 83 cents a bushel. How many bushels must he sell at 95 cents a bushel so as to gain $216?

8. Ella has four times as many chickens as Jane, and both have 75. How many chickens has each?

9. John starts on a journey at the rate of 4 miles an hour, and 2 hours afterwards James starts after him at the rate of 6 miles an hour. How long will it take James to overtake John?

10. A farmer bought 24 pigs at $5 each. He lost 4 of them and sold the rest for as much as he paid for the 24. How much did he get for each?

11. Find the value of 3,600 pounds of wheat at 86 cents a bushel, 1,700 pounds of oats at 34 cents a bushel, and 960 pounds of barley at 67 cents a bushel.

12. A man sold 7 cows at $57 each, and 23 pigs at $7 each. With the money received he bought 28 sheep. What was the value of each sheep?

XXXI.

1. The product is 4,789,392, and the multiplicand 678. What is the multiplier?

2. Divide $768 between two men, giving one of them $24 less than the other.

3. Two men have together $1,924. One of them has $148 more than the other. They bought cows at $37 each. How many cows did each buy?

4. A farmer sold 63 bushels of wheat and 28 bushels of oats for $56.77. If he received 75 cents a bushel for the wheat, how much per bushel did he get for the oats?

5. When apples are worth 14 cents a dozen, how much should I pay for 492 apples?

6. Find the value of 4 barrels of sugar, each barrel weighing 280 pounds, at 10 pounds for $1, 1,248 eggs at 12 cents a dozen, 72 geese at $1.50 a pair, and 4 pounds of rice at 5 pounds for 25 cents.

7. Find the expenses of 9 persons for a journey of 78 miles, the railway fare being 3 cents each per mile, and the other expenses $1.75 each.

8. A man earns $50 a month, but his expenses are $20 a month. How long will it take him to pay for a farm of 75 acres worth $64 an acre?

9. A merchant bought 29 gallons of molasses for $21. He sold it so as to gain $3.65 on the whole. What price did he get per gallon?

10. A coal merchant bought coal at $5 a ton, and sold it at $6.50 a ton, gaining thereby $12. How many tons did he buy?

11. A buyer bought 68 head of cattle at $47 each. He sold half of them at $54 each, and the remainder at $45 each. How much did he gain on all?

12. A newsboy sells 26 copies of the *Globe* and 28 copies of the *Mail* every day. He has a profit of one cent on each copy. How long will it take him to pay for a suit worth $6.48?

THIRD CLASS.

XXXII.

1. What is the cost of 6 pigs, each weighing 250 lbs., at $7 a hundredweight?

2. How much greater is the product of 15 and 16 than the product of their sum and difference?

3. A farmer went to town and sold 20 bushels of wheat at $1.20 per bushel. He bought 3 lbs. of tea at 75 cents a lb., 20 lbs. of sugar at 11 cents a lb., and a pair of boots at $4.75. How much more money did he bring home than what he spent?

4. How much is six times the product of the sum and difference of 364 and 226?

5. A man receives a salary of $1,180 a year. Out of his salary he saves $348 each year. How much does he spend a week, counting 52 weeks to the year?

6. Making a street 250 yds. long, cost a certain sum of money, had it been 12 yds. longer, it would have cost $72 more. How much did the street cost?

7. A miller put 125 barrels of flour, each containing 196 lbs., into a number of bags of 25 lbs. each. How many bags had he?

8. A railway train ran for 16 days of 24 hrs. each, at the rate of 19 miles an hour. How many miles did it run?

9. A fence 66 ft. long cost $96 less than if it had been 78 ft. in length. How much did the fence cost?

10. How many bushels of oats will weigh as much as 306 bushels of wheat?

11. I bought 8 sheep at $3.50 each, but 2 of them died. At what price must I sell each so as to gain $8 on the transaction?

12. How many boards, each 12 feet long, will be required to build a fence 9,612 feet long, the fence being 5 boards high?

XXXIII.

1. If 5 sheep be worth $20 and 7 pigs worth $42, how many sheep ought I to get for 24 pigs?

2. A city contains 415,140 people. It has 85 streets with 407 houses on each street. How many persons are there to each house?

3. There are 10,800 pupils in a county containing 12 townships, and 18 schools in each township. How many pupils are there to each school?

4. If four horses eat 12 tons of hay in 8 months, how many tons will 5 horses eat in the same time?

5. How much less than $70,000 will 697 horses, at $87 each, cost?

6. A man sold 98 horses at $127 each, 246 cows at $48 each, and received in payment $20,948. How much remains due?

7. A person took 30 bushels of wheat to town and sold it for $1.25 a bushel. He received in payment $9.50 in money and the balance in flour worth $7 a barrel. How many barrels did he get?

8. A has $3,675 more than B and $297 less than C, who has $8,764. D has as much as A and B together. How much has D?

9. A house worth $4,765 stands on a farm worth four times as much and $625 more, and the stock on the farm is worth three times as much as the house, lacking $5,678. What is the value of all?

10. A person exchanges 124 yds. of cloth, worth 57 cents a yard, for barley worth 62 cents a bushel. How many bushels does he get?

11. When barley is worth 75 cents per bushel, a man exchanges 25 bushels for 5 pigs. How much less than $5 did each pig cost?

12. A woman bought 685 chickens at 12 cents each, and sold them so as to gain $13.70 on all. How much did she get for each?

XXXIV.

1. If 4 men cut a field of grain in 48 days, how long would it take 12 men to cut it?

2. I spent $37 in buying sheep, and sold them at $6 each, gaining thereby $5. How many sheep did I buy?

3. The sum of two numbers is 2,304, and the lesser number is 8; find their quotient.

4. A man spent $685,713 in buying flour at $7 a barrel. How many barrels less than 100,000 had he?

5. Six men bought a farm for $5,004. They rented it for 3 years at $240 a year, and then sold it for $4,500. How much did each gain?

6. A person bought 8 cattle at $35 each, and 6 others at $48 each. He sold the whole lot at a gain of $20. What price did he get for each?

7. How many times can you subtract 5,048 from 1,039,888?

8. One boy goes 3 miles an hour and another 4 miles an hour in the opposite direction. How long must they travel before they will be 4,606 miles apart?

9. A boy divided 8,109 candies among 8 schoolfellows and himself, giving each an equal number. How many had each?

10. A woman bought 9 chickens and sold them for 27 cents less than they cost. If the cost was 126 cents, how much did she get for each?

11. If 4 pints of plums cost 16 cents, how much more will 12 pints cost than 9 pints?

12. A man sold 28 cows at $39 each, and received in payment $42 and the balance in sheep at $7 each. How many sheep did he get?

XXXV.

1. From the product of 48 and 8 subtract their quotient.

2. If 756 tons of hay cost $10,584, how much will 16 tons cost?

3. How many horses worth $96 each should be given for 248 cows worth $36 each?

4. I divided 128 pears among an equal number of boys and girls, giving each boy 3 pears and each girl 5. Find the number of children.

5. For $60 I can buy 8 cwt. of pork. How much would 10 cwt. cost at this rate?

6. A farmer bought 17 cows, and sold 12 of them at $29 each and the remainder at $24 each. He then found that he had lost $8 on them. What price did each cow cost?

7. If a single article cost 75 cents, how many dozen can be bought for $252?

8. If 25 cows cost $700, how much less will 17 cows cost?

9. The quotient is 1,007, the divisor 8,161, and the remainder 4,673. How much more than 8,222,791 is the dividend?

10. What will be the cost of 17 lbs. of butter when 28 lbs. cost $7?

11. The divisor is 284 and the quotient 7 more than the divisor. Find the dividend.

12. By what number must I multiply 48 so as to give the same product as 576 × 324?

XXXVI.

1. If a person pays $1.36 for 4 lbs. of coffee, how many pounds ought he to get for $2,958 ?

2. If 654 acres of land cost $29,430, how much more will 682 acres cost ?

3. A man bought a farm of 228 acres for $15,276. He sold 139 acres of it at $86 per acre, and the remainder for what it cost. Find his gain.

4. A drover bought 64 sheep at $5 each, 287 at $4 each, and 96 at $3 each. He sold the whole lot at a gain of $926. What price did he get for each ?

5. If 4 hens be worth $3, and 7 hens worth as much as 15 chickens, find the value of one chicken.

6. A man sold 288 sheep for $2,520, by which price he gained $2 on each. How much did each cost ?

7. A man paid $686 for 7 horses and $333 for 9 cows. How many horses would cost the same amount as 196 cows ?

8. A man exchanges 48 sheep for 192 lambs when 12 sheep are worth $96. Find the difference between the value of 9 sheep and 9 lambs.

9. A man sold 284 bushels of wheat for $426, gaining 9 cents a bushel. How much more than a dollar a bushel did it cost ?

10. One side of a square field is 7,776 inches. How many yards is it around the field ?

11. A merchant bought 10 gals. of spirits at $4 a gal., but 3 gals. leaked out. At what price must he sell the remainder so as to gain $2.28 on the whole quantity ?

12. If I pay $7.83 for a caddie of tea containing 9 lbs., how much should I pay for one containing three pounds ?

XXXVII.

1. What number divided by 68 will give a quotient of 109 and remainder of 59 ?

2. Of what number is 308 both divisor and quotient ?

3. What number must be added to 7,111 so that it may be exactly divisible by 6,007 ?

4. What number taken from 63,634,743 will make it exactly divisible by 7,065 ?

5. The quotient is 503, the divisor 476, and the remainder one-seventh of the divisor. Find the dividend.

6. A man bought 57 cows at $29 each, and spent $3 each on feeding them. After 6 of them died he sold the remainder at $38 each. Find his entire gain.

7. If the wages of 15 men for 3 days amount to $90, how many men ought to work 5 days to receive $100?

8. If 4 lbs. of sugar cost 32 cents, how much would a barrel which weighs 3 cwt. cost?

9. A farmer bought horses from one man at $75 each, and the same number from another at $97 each. If the whole amount paid was $13,416, how many horses did he buy?

10. When pork is worth $6.50 per cwt., how much ought I to pay for 24 lbs.?

11. A man who earns $1,000 a year spends $4 a week for board, $3 a month for clothes, and $2 a day for other expenses. How many years will it take him to save $182?

12. If 24 men earn $36 in 1 day, and 25 boys earn $12.50 in one day, how many boys will earn as much as one man in any given time?

XXXVIII.

1. Two men begin to empty a well containing 1,980 gals. of water. One of them pumps out 70 gals. and the other 60 gals. every hour, but 20 gals. leak in every hour. How long will it take them to empty it?

2. If you can buy 272 yards of cloth for $68, how many yards can you buy for $375?

3. A man spent $55.25 buying sheep at the rate of $13 for 4 sheep. How many did he buy?

4. How many pounds in two loads of flour, the one containing 25 barrels and the other 36 barrels?

5. How long will it take a person to count $100 in twenty-cent pieces at the rate of 2 coins every 4 seconds?

6. Six bags of barley, each weighing 108 lbs., cost $8.10. What was the price per bushel?

7. A street 24 miles long cost $5,760. How much more would it have cost had it been 33 miles long?

8. If 18 horses plough a field in 30 days, how long would it take 27 horses to plough it?

9. Find the value of a quarter of beef, weighing 120 lbs., at $6.50 per cwt.

10. A grocer sold 670 lbs. of flour at $6.50 per 100 lbs. How much money did he receive for it?

11. Twelve men engage to dig a cellar in 24 days, but owing to sickness 4 of them are unable to work. How long will it take the remainder to dig it?

12. A piece of work was to be done by 27 men in 132 days, but some of the men took sick, and it took the rest 162 days to do it. How many men were sick?

XXXIX.

1. What is the value of 1,260 lbs. of wheat if 4 bushels cost $3.60?

2. If 4 men in 12 days earn $48, how long would it take 1 man to earn $12.50?

3. How many men in 34 days can do the same amount of work as 28 men in 85 days?

4. What is the remainder, after subtracting 777 as many times as you can from 1,869,405?

5. When 684 bushels of wheat cost $820.80, what is the value of 10 lbs.?

6. How many yards are there in 216 chains?

7. How many rods are there in 4 miles?

8. How many cords are there in a pile of wood containing 1,536 cubic feet?

9. How many gallons are there in 488 pints of milk?

10. If 8 curtains take 64 yards of cloth worth 59 cents a yard, what is the value of each curtain?

11. What is the value of 896 cubic feet of wood at $3.25 per cord?

12. If the length of a railroad be 25 miles, and the cost of building it $202,500, find the cost of 160 rods.

XL.

1. A man bought a farm for $13,464, and sold one-half of it for $77,22 at $78 per acre. How much did it cost per acre?

2. What is the average weight of 3 loads of wheat of 27 bush. 12 lbs., 18 bush. 29 lbs., and 36 bush. 7 lbs. respectively?

3. How many yards is it round a field 38 chains long and 25 chains wide?

4. If 5 feet of rope cost 15 cents, what will 2 yards cost?

5. If 4 yards of cloth cost 132 cents, and 8 feet of lace cost 40 cents, how many yards of such cloth should be given in exchange for 22 yards of lace?

6. How many times must 568 be added to itself to make 157,904?

7. What number added 8 times to itself will produce 3,321?

8. If a dozen eggs weigh 2 lbs. 4 ozs., what will be the average weight of each?

9. A drover bought 64 cows at $48 each, and sold 25 of them at $46 each. For how much a head must he sell the remainder so as to gain $184 on all?

10. What number multiplied by 25, 54 added to the product, the sum divided by 17, and 28 subtracted from the quotient, will leave 34?

11. A drover bought a number of horses for $6,512, and sold part of them for $3,276 at $84 each, losing $156 on what he sold. How many did he buy?

12. A man sold two houses for a certain sum of money, gaining $478 on one of them, and losing $282 on the other. What was his average gain on each?

XLI.

1. If 6 yards of cloth cost $30, how many pounds of butter worth 16 cents a pound should be given in exchange for 8 yards of the cloth?

2. The sum of $64 was paid for eggs at the rate of 3 eggs for 1 cent. How many dozen were there?

3. A man in business gained $1,786 the first year, lost $948 the second year, lost $976 the third year, gained $2,795 the fourth year, and lost $922 the fifth year. Find his average gain.

4. Two railroad trains are 5,000 miles apart, and approach each other, the one at the rate of 18 miles an hour, the other 25 miles an hour. How far will they be apart in two days?

5. A man found a bagful of coins containing five-cent and ten-cent pieces, and the same number of each kind. The bag contained $30. How many coins were in it?

6. By what number must $3,000 be divided to produce $7.50?

7. A woman sold two tubs of butter weighing together 60 lbs., one being 1 lb. 8 ozs. heavier than the other. How much did each tub weigh?

8. A man has a salary of $150 a month and spends $2.20 each day. How much does he save in 3 years?

9. A farmer sold a load of wheat for $141 at $1.50 per bush., each bag containing 2 bushels. How many bags were on the load?

10. Two boys coming from opposite directions met at their schoolhouse. The distance both together travelled was 1,916 yds., and one of them had travelled 224 yds. more than the other. How far did each live from the school?

11. What will 6 ft. of cloth cost if 12 yards cost $1.44?

12. If a boy waste 2 minutes every hour, how many minutes will he waste in 5 years?

XLII.

1. A grocer mixed 6 lbs. of tea worth 60 cents per lb. with 4 lbs. worth 70 cents per lb. How much is the mixed tea worth per lb.?

2. A lends B $630, and B pays him back $35 every 2 months. In how many years will the debt be paid?

3. A man bought 5 loads of wheat, each load containing 37 bags, and each bag 2 bushels, for $444. What was the price per bushel?

4. A person bought 256 ozs. of tea for $12.80. What was the price per lb.?

5. A man has $19,043 in cash; he buys 45 horses at $87 each, and 96 at $125 each. How many horses at $68 each can he buy with the balance of the money?

6. A woman sold eggs at 10 cents a doz., gaining thereby 2 cents on each doz. How much did 600 eggs cost her?

7. A man bought cordwood for $80, and by selling it at $3.25 a cord gained $7.75. How many cords did he buy?

8. How much should I get for 1,078 lbs. of flour at $6 per barrel?

9. How many times should I pay $27.75 in order to pay off a debt of $777.

10. A man put 17 gals. 2 qts. of milk into two cans, putting 2 gals. more into the one than into the other. How much did he put into each can?

11. Three men were to share $5 among them. The first was to get 20 cents more than the second, and the second was to get 15 cents more than the third. How much was each to get?

12. Three men, A, B, and C, have together $1,107. A had $456, and C had $117 less than B, who had $15 more than one-third of what they all had. How many dollars had C?

XLIII.

1. How many times 16 is 17 times 32?

2. Divide the continued product of 351, 484, and 1,728 by $144 \times 234 \times 33$.

3. A man sold 3 sheep for $34. For the first he received $4 less than for the second, but $3 more than for the third. What did he get for each ?

4. A man paid $83.20 for wheat, and sold part of it for $42 at $1.50 per bushel, by which price he gained $5.60 on what he sold. How many bushels did he buy ?

5. A man had 444 bushels of wheat in 3 years. He had 20 bushels more the second year than the first, and 20 bushel more the third year than the second. How many bushels had he the third year ?

6. A tree 42 feet long was cut into three pieces ; the first was 9 feet shorter than the second, but three feet longer than the third. What was the length of each piece ?

7. If I sell sugar at 10 lbs. for $1, how much shall I get for a barrel weighing 3 cwt. ?

8. Find the cost of 16 lbs. 8 ozs. of butter at 20 cents per lb.

9. If 4 men earn $24 in 4 days, how much would 5 men earn in 12 days ?

10. A teacher divided 60 apples among his pupils, giving each girl 3 and each boy 2 apples, and there were the same number of boys as girls. How many pupils were in the school ?

11. If 3 pigs cost $18, and 4 pigs cost as much as 8 sheep, how much more are 8 pigs worth than 9 sheep ?

12. The total weight of three chests of tea is 255 lbs. ; the second weighs 14 lbs. 2 ozs. more than the first, but only 2 ozs. more than the third. How much does each weigh ?

XLIV.

1. A person gave $500 for 184 gals. of wine. How much water must he add so that he may sell it at $3 a gallon, and gain $100 on all ?

2. If 20 men in 4 days earn $90, how many men should work 12 days to receive $54 ?

3. A man found a roll of 200 bills, consisting of two-dollar, four-dollar, and five-dollar bills. There were 20 more four-dollar than five-dollar bills, and ten more two-dollar than four-dollar bills. How many dollars did he find ?

4. I sold envelopes at 10 cents a package, gaining 2 cents on each package of 24. Find the cost of 150 envelopes.

5. How much should I get for 688 qts. of cherries at 40 cents a peck ?

6. The total weight of 4 horses was 5,149 lbs. ; the first horse weighed 107 lbs. less than the second, but 37 lbs. more than the third, which weighed 84 lbs. less than the fourth. How much did each horse weigh ?

7. If 8 men cut 48 acres in 2 days, how long would it take 3 men to cut 36 acres ?

8. A man made 105 pairs of shoes in 3 months, making each successive month 5 pairs more than the month before. How many pairs did he make the third month ?

9. If it takes 10 rails to fence one rod, how much will it cost to fence a field 40 rods long and 20 rods wide, rails being worth $35 per M. ?

10. How many yards of carpet worth $2.50 a yd. can a man get in exchange for 44 bushels of wheat, worth $1.25 a bushel, and 50 bushels of potatoes worth 50 cents a bushel ?

11. How much will it cost to gravel 320 rods of road at $2 per yard ?

12. A farmer has $6,040, with which he can purchase a certain number of horses at $95 each and twice as many cows at $28 each. How many animals can he buy ?

XLV.

1. If 82 miles of road cost $24,000 more than 70 miles, how much would 7 miles cost?

2. If 4 pigs be worth 3 sheep, 2 sheep worth 4 calves, and 3 calves worth $6, what is the value of one pig ?

3. Distribute $74 among 3 men so that the second may get twice as much as the first and the third five times as much as the first.

4. I bought a farm for $5,000 and spent $600 on fencing it. I then sold half of it for $3,760 at $47 per acre. Find what the farm cost me per acre.

5. A and B have an equal share in a bin of wheat containing 64 bushels ; A takes 27 bushels and B the rest, paying A $3.75. What was the value of the wheat per bushel ?

6. What is the value of 217 lbs. of oats at 68 cents per bushel ?

7. If 35 men dig a drain in 60 days, how many men less would dig it in 84 days ?

8. One horse being equal to 2 oxen, how long would it take 6 horses to plough 16 acres, when 10 oxen can plough 8 acres in 6 days ?

9. In a mixture of coffee and chicory there are 8 ozs. of coffee to every 2 ozs. of chicory. How much of each kind will there be in 5 lbs. of the mixture?

10. A man bought 288 bottles of wine at 70 cents a bottle; 9 bottles were spoiled, and he sold the remainder at $10.80 a dozen; find his whole profit.

11. If 25 men reap 100 acres in 8 days, how many men would reap 6 acres in 6 days?

12. A merchant bought 6 pieces of cloth, all of the same length, at $2.25 a yard. He gained $10.50 on his whole outlay by selling 3 of the pieces for $510. How many yards were in two pieces?

XLVI.

1. Divide 100 cents among John, William, and Henry, so that William shall get 9 cents, and Henry 10 cents for every 6 cents given to John. How many cents will each get?

2. A man sold 9,650 lbs. of barley at 96 cents a bushel to pay a note of $200. How much remains unpaid?

3. A merchant bought 17 gallons of vinegar at 28 cents a gallon, but 3 gallons leaked out; how much water must be added to it if he sells it at 32 cents a gallon, gaining thereby 36 cents on the whole?

4. Divide 405 apples among A, B and C, giving B twice as many as A, and C three times as many as B.

5. What quantity of water must I add to 87 gallons of wine if I sell it for $297 at $2.75 per gallon?

6. If 8 hats cost as much as 24 pairs of gloves worth $1.25 a pair, how many hats can be bought for $105?

7. John Smith bought of Lauder Bros., Jan. 8th, 28 yds. linen at 38 cents a yd., 76 yds. flannel at 45 cents a yd.; Jan. 17th, 18 lbs. sugar at 9 cents a lb., 17 lbs. tea at 39 cents a lb., 3 gallons molasses at 78 cents a gallon; Feb. 23rd, 27 yds. calico at 14 cents a yd., 8 bars soap at 6 cents a bar; April 4th, 8 lbs. currants at 6 cents a lb., 4 lbs rice at 5 cents a lb., and 4 dozen eggs at 18 cents per dozen. On May 5th, $25 was paid on the above account, and the balance was paid on June 18th. Make out a bill of the above account.

8. A farmer sold a load of wheat, which was weighed in three portions. The first portion weighed 867 lbs., the second 596 lbs., and the third 787 lbs. If the price was 78 cents per bushel, how much did he receive for the load?

9. Make out the total cost of the following :—

1,155 lbs. wheat at 84 cents per bushel.
901 lbs. oats " 36 " " "
588 lbs. barley " 60 " " "
1,110 lbs. peas " 72 " " "

10. How many pints of vinegar in 2 barrels, containing 36 gallons each ?

11. Find the value of 23 gallons, 3 quarts of milk at 3 cents a pint.

12. What is the value of 2,304 pints of molasses at 65 cents a gallon ?

XLVII.

1. How many ounces in two stacks of hay, the one containing 7 tons and the other 8 tons ?

2. A man buys tobacco at $65 a cwt., and sells it at 5 cents an oz. How much does he gain on a cwt. ?

3. A merchant buys 7 tons of iron at $3.50 per cwt., and sells it at 5 cents a lb. How much does he gain on the whole quantity bought ?

4. How many ounces of tea worth 56 cents a lb. can be got for 40 yards cloth worth 28 cents a yard ?

5. A grocer bought a quantity of sugar containing one-quarter of a ton for $40, and sold it at 9 cents a lb. ; how much did he gain on it ?

6. A grocer put up 4 tons of salt in bags weighing 8 lbs. each, which he sold for 18 cents per bag. How much did he receive for it ?

7. What is the value of 2 bushels 3 pecks of cherries at 8 cents a quart ?

8. What is the value of 150 feet of lumber at $15 per M. ?

9. How many steps, 36 inches each, in a road 17 miles in length ?

10. A certain block of land is 2 miles 87 rods around it. How many inches is it around it ?

11. Express 183,997 yards in miles and rods.

12. How many telegraph poles are there in 20 miles of line, the poles being 4 rods apart ?

XLVIII.

1. If it cost $3 50 to gravel 4 yards of road, how much will it cost to gravel 2 miles of road ?

2. Find the value of a car-load of coal containing 19 tons 1,200 lbs. at $6 per ton.

3. What will be the cost of a pile of wood containing 1,600 cubic feet, at $3.50 per cord?

4. How many boxes, each holding one quart, will be required to hold 4 bush. 3 pecks 1 gal. of strawberries? How much would they be worth at 6 cents a box?

5. How many square rods are there in a farm of 100 acres?

6. How many minutes are there in July and August?

7. How many village lots, each containing 288 square yards, are there in 878 acres 64 square rods?

8. How many acres and square rods are there in a field of 887 square rods?

9. How many feet will a man walk in going round a farm 50 chains long and 20 chains wide?

10. A certain lot of one acre has on an average one stone on every square foot. How many stones are on the lot?

11. A field is 40 rods long and 20 rods wide. How many square rods of land are there in it? How many acres in it?

12. Two tubs of butter of the same weight cost $4.48 and $6.16 respectively. The price of the first tub was 16 cents per lb.; what was the price of the other?

XLIX.

1. How many cords are there in a pile of four foot wood, the pile being 32 feet long and 5 feet high?

2. How many acres are there in a field 4,356 feet long and 200 feet wide? How much would it cost at $65 per acre?

3. A man owns two fields, one containing 4 acres 120 square rods, and the other 5 acres 80 square rods; what is the value of both at $40 per acre?

4. When 3 cords of wood cost $12, what will be the cost of a pile of cord-wood 24 feet long, 6 feet high, and 4 feet wide?

5. John owns 4 acres 109 square rods of land, James owns 147 square rods 25 square yards, Harry owns 5 acres 6 square rods 16 square yards, and William 6 acres 327 square rods 29 square yards. How much do all own?

6. How far will a man walk in three hours, walking 2 miles 163 rods 4 yards 2 feet the first hour, 1 mile 235 rods 3 yards 1 foot the second, and 4 miles 268 rods 2 yards the third hour?

7. How many chains are there in 6 miles 80 rods?

8. How much must I add to 823 lbs. 6 ozs. so that I may have 3 tons?

9. A farmer who had 300 bushels of wheat, sold 25 bushels 3 pecks 1 gallon to one man, and twice as much to another. How much had he left?

10. How far will a man walk in 9 days at the rate of 13 miles 12 rods 5 yards 6 inches each day?

11. A man who had 8 fields of 18 acres 117 square rods each, sold 29 acres 159 square rods. How much land had he left?

12. How much grain will a farm of 225 acres produce at the rate of 22 bushels 3 pecks 1 gallon 3 quarts per acre?

L.

1. Two men travel in opposite directions, the one going 3 miles 108 rods, and the other 3 miles 30 rods every hour. How far will they be apart in 7 days?

2. How many cubic feet of earth must be taken out of a cellar 16 feet long, 12 feet wide, and 6 feet deep?

3. How many parcels, each weighing 3 lbs. 2 ozs., are there in a load of one ton?

4. A farmer has a field 60 rods long and 40 rods wide; how much wheat will be required to sow it at the rate of 2 bushels 2 pecks 1 gallon to the acre?

5. Seven equal stacks of hay contain 85 tons 254 lbs.; what is the average quantity of hay in each stack?

6. A farmer put 1,140 bushels of wheat into 480 bags of uniform size. How much did he put into each bag?

7. A person walking 3 miles 25 rods an hour starts at 9 o'clock in the morning from Orangeville to Brampton, and at the same time another person walking 2 miles 135 rods an hour starts from Brampton to Orangeville. When will they meet, the distance between Brampton and Orangeville being 22 miles? How far will they be from Brampton when they meet?

8. How many times can you fill a measure which holds 1 gallon 1 quart from a barrel of coal oil containing 50 gallons?

9. How many bricks 9 inches long, 4 inches wide, and 3 inches thick will be required for a wall 24 feet long, 6 feet high, and 13 inches thick, no allowance being made for mortar?

10. How many feet of lumber will be required to floor a room 18 feet long and 16 feet wide?

11. A gallon of water weighs 10 lbs., and a cubic foot 62 lbs. 8 ozs. How many gallons would a cistern which contains 748 cubic feet hold?

12. How many boards 12 feet long and 1 foot wide will be required to floor a room 24 feet long and 18 feet wide?

LI.

1. How many boards 11 feet long will be required to fence a field 40 rods long and 20 rods wide, supposing the fence to be 4 boards in height?

2. How much will 3 reams 17 quires of paper cost at 20 cents a quire?

3. Find the value of 27 square miles 258 acres of land at $78 per acre.

4. A grocer paid $49.60 for two barrels of molasses, and found that the cost was 8 cents a pint. How many gallons were there in each barrel?

5. An iron bar weighing 12 lbs. 8 ozs. is made into 5 equal bolts worth 4 cents a pound. Find the value of one dozen bolts.

6. How many square yards of carpet will cover a room 18 feet long and 15 feet wide?

7. How many hills of potatoes can be planted in a field of 3 acres, allowing a square yard to each hill?

8. At $12 per M., how much will be the cost of the lumber for a close board fence 60 rods long and 6 feet high?

9. A can run 5 miles an hour and B 6 miles; how many minutes start must B give A in a race of 4 miles so as to finish at the same time?

10. A bicycle wheel 12 feet in circumference makes 2,640 revolutions in running the distance between two towns. How many miles are the towns apart?

11. James has 80 yards start of John, and runs 9 yards while John runs 11 yards. How far will James run before John overtakes him?

12. The *Daily Mail* newspaper is about 24 inches long and 18 inches in width, and contains 8 pages each copy. If spread out, how many days' copies would it take to cover an acre?

LII.

1. A man had a journey of 80 miles to go. He travelled 14 miles 187 rods 4 yards in one day, and 27 miles 296 rods 3 yards the next. How far had he yet to go?

2. How many pounds and ounces are there in a gallon of wheat?

3. A grocer sold 12 lbs. 7 ozs. of cheese to one woman, 8 lbs. 6 ozs. to another, and 9 lbs. 11 ozs. to a third. He received $5.49 for all. How much was the price per pound?

4. Herbert had 10 cents, Harry had 8 cents, and Willie had 3 cents. They bought 84 marbles with their money. How many marbles should each take?

5. How many yards of carpet, 3 feet wide, will be required to carpet a room 15 feet long and 9 feet wide?

6. What will be the cost of digging a cellar 12 feet long, 9 feet wide, and 5 feet deep, at 27 cents per cubic yard?

7. A piece of land 4 miles long and 2 miles 80 rods wide was divided into farms of 72 acres each. How many farms were there?

8. What is the total cost of the following:—

128 lbs. of pork, at $6.25 per 100 pounds.
1,650 lbs. of bran, " $12 a ton.
2,750 lbs. of hay, " $10 "

9. A coal-dealer gained $15.30 by buying a quantity of coal for $5.50 per ton, and selling it at 36 cents per cwt. How many tons did he buy?

10. The fore and hind wheels of a wagon are 9 feet and 12 feet in circumference respectively. How many turns will the fore wheel make while the hind wheel makes 729?

11. A dishonest milkman bought 8 gallons 3 quarts of milk at 12 cents a gallon, and after adding 1 gallon 2 quarts of water, he sold it at 5 cents a quart. How much did he gain on the transaction?

12. A man owned three piles of wood containing 14 cords 28 cubic feet, 8 cords 96 cubic feet, and 9 cords 47 cubic feet respectively. He sold 6 cords 107 cubic feet out of it. How much is the remainder worth at $4.40 per cord?

LIII.

1. How many fields 45 rods long and 32 rods wide can be made of a farm of 108 acres?

2. The fore quarters of an ox weighed 129 lbs. 7 ozs. each, and the hind quarters 153 lbs. 5 ozs. each. How much was the ox worth at 6 cents a pound?

3. If 8 men can mow 9 acres 24 square rods of grass in a day, how much can 15 men mow in a week?

4. Divide 27 bushels of potatoes between two men, giving one of them 2 bushels 3 pecks more than the other.

5. If 6 horses fed three times a day for 6 days eat 40 bushels 2 pecks of oats, how much was one horse fed each time?

6. How many times can 13 miles 12 rods 5 yards 6 inches be subtracted from 117 miles 116 rods 2 yards 1 foot 6 inches?

7. What will be the cost of ties for a railway 12 miles 80 rods long, the ties being placed 2 ft. from centre to centre and costing 12 cents each?

8. A wagon loaded with hay weighs 3,750 lbs., and the wagon alone weighs 1,125 lbs. How much is the load worth at $12 per ton?

9. When 4 pounds of butter are worth as much as 3 pounds of cheese, how many pounds of butter are worth as much as 42 pounds of cheese?

10. A car load of coal contained 19 tons 650 lbs. A man hauled a number of loads of 1 ton 320 lbs. each, leaving 1 ton 1,850 lbs. on the car. How many loads did he haul?

11. A clock which gains 2 minutes in 7 hours is set correctly at 12 o'clock on Saturday. How much will it be too fast at 12 o'clock the following Saturday?

12. How many fields of 17 acres 109 sq. rds. 25 sq. yds. 8 sq. ft. 47 sq. in. each can be made from a tract of land containing 1,202 acres 110 sq. rds. 8 sq. yds. 3 sq. ft. 100 sq. in.?

LIV.

1. How much will it cost to cover a floor 21 ft. long and 18 ft. wide, with carpet at 75 cents per square yard?

2. A field containing 5 acres is 40 rods long. How wide is the field?

3 A stick of square timber 18 ft. long, 2 ft. wide, and 1 ft. thick weighs 1,944 lbs. Find the weight of one cubic foot.

4. How many pieces of carpet each 4 yds. 8 in. long can be cut from a web of 80 yds., and what length will remain over?

5. How many feet of lumber will it take to build a close board fence 6 ft. high around a lot 12 rods long and 8 rods wide?

6. How many square feet are there in 4 windows, each 6 ft. high and 3 ft. wide?

7. How many square yards of plastering are there in the ceiling of a room 12 ft. long and 9 ft. wide?

8. A quantity of cordwood consists of 3 rows, each 28 ft. long and 8 ft. high. How much is it worth at $4.50 per cord?

9. How many times can you take 2 bush. 3 pks. from 275 bush 1 pk. 1 gal., and have 69 bush. 1 gal. left?

10. A case containing 36 dozen oranges was bought for $7.20, and sold at the rate of 8 oranges for 22 cents. How much was gained on it?

11. How much will it cost to plaster the ceiling of a room 18 ft. long and 14 ft. wide, at 28 cents per square yard?

12. What is the total cost of the following: 8,600 rails at $6.75 per C.; 2,270 feet of lumber at $18 per M.; 3,785 pounds of bran at $18 per ton; 5,746 bricks at $4.50 per C.?

LV.

1. How many square yards of plastering are there in the walls of a room 12 ft. long, 9 ft. wide, and 10 ft. high, no allowance being made for windows and doors?

2. The road between two villages is 4 rods wide and contains 32 acres. How far are the villages apart?

3. How many pickets, each 6 in. wide, placed 3 in. apart, will be required for 40 rods of fence?

4. A lot 24 rods long and 18 rods wide was fenced with a straight rail fence 5 rails high. If the rails were 11 ft. long and cost 4 cents each, how much did the fence cost?

5. A merchant bought an equal number of bushels of wheat, barley, and oats. The wheat cost him 83 cents per bushel, the barley 60 cents per bushel, and the oats 35 cents per bushel. If the amount he paid for all was $99.68, how many bushels of grain did he buy?

6. How many strips of carpet 3 ft. wide will be required for a room 12 ft. long and 9 ft. wide, if the strips run lengthwise of the room? How many if the strips run across the room?

7. What is the total cost of the following: 288 lbs. rye at 70 cents a bushel; 228 lbs. potatoes at 40 cents a bushel; 960 lbs. timothy seed at $1.50 a bushel; 366 lbs. clover seed at $4 a bushel; 684 lbs. Indian corn at 28 cents a bushel?

8. A man paid $12.72 for 12 bushels of barley and 12 bushels of oats, paying $2.40 more for the barley than for the oats. What was the price of each per bushel?

9. How many strips of carpet will be required for a room 15 feet long and 12 feet wide, the carpet being 27 inches wide and running lengthwise of the room? How much will be turned under?

10. Three sections on a railway are 4 miles 125 rds., 5 miles 76 rds., and 4 miles 119 rds. respectively. How long will it take a train running at the rate of 28 miles an hour to pass over them?

11. A pile of cord-wood containing 9 cords is 48 feet long. How high is it?

12. A woman sold 8 turkeys and 8 geese for $11.60, getting 25 cents a piece more for each turkey than for a goose. What price did she get for each?

LVI.

1. How much will it cost to plaster the walls and ceiling of a room 15 ft. long, 12 ft. wide, and 9 ft. high, at 27 cents a square yard, deducting 72 square feet for windows and doors?

2. A room 18 ft. long takes 252 feet of lumber to floor it. How wide is the room?

3. How many yards of carpet will be required for a room 18 ft. long and 10 ft. wide, the carpet being 27 in. wide and running lengthwise of the room? How much would it cost at 85 cents a yard?

4. The quotient of two numbers is 879, and five times the lesser number is 40,475; find the greater.

5. The average weight of 5 loads of hay was 2,640 lbs., and two of them weighed 2 tons 200 lbs.; what was the average weight of the other three loads?

6. How many yards of carpet 34 in. wide will be required for a room 15 ft. long and 12 ft. wide, if the strips run across the room. How much will be turned under? What would it cost at 50 cts. a yard?

7. White and Martin agreed to work a farm of 100 acres on shares, White working 44 acres of it and Martin the remainder. They expended $217 for fences and sold the whole crop for $2,367. How much should each receive out of this amount?

8. If one rod of fence cost 85 cts., how much would it cost to fence both sides of a railway 68 miles long?

9. A man bought a number of tons of hay for $3,120, and sold it for $3,240, gaining thereby 25 cents a ton; how much did it cost per ton?

10. A man walking 3 miles 306 rds. 3 yds. 2 ft. an hour takes 110 steps every minute; how long is his step?

11. A farmer was offered a wagon which would last 6 years for $75, or one which would last 5 years for $66. Which was the better offer?

12. A cubic foot of water contains 25 quarts. How many gallons will fill a rectangular cistern 6 feet square and 8 feet deep?

LVII.

1. Allowing 90 cubic feet of air to each pupil, how many pupils could be accommodated in a school-room 27 ft. long, 18 ft. wide, and 10 ft. high?

2. How many barrels of pork would weigh as much as 100 barrels of flour?

3. Canadian wall-paper is 21 in. wide. How many strips would be required for a wall 12 ft. long? How much would need to be cut off the last strip?

4. Three men rented a pasture-field of 12 acres at $4 an acre. The first man put in 3 cows, the second 4 cows, and the third 5 cows. What portion of the rent should each pay?

5. How many strips of wall-paper 21 in. wide will be required for a room 21 ft. long and 14 ft. wide, deducting 5 strips for windows and doors?

6. In 29,964 pence how many pounds and shillings are there?

7. Express 599,295 farthings in pounds, etc.

8. How many farthings must I add to the sum of £21 and £63, in order to make £132?

9. When cheese was worth 50s. per 100 lbs. in England, a man shipped 3 tons from Canada. The shillings being worth 24 cents, how much Canadian money did he receive for his cheese?

10. How many yards of wall-paper 21 in. wide will be required for a room 14 ft. long, 8 ft. wide, and 9 ft. high, deducting 4 strips for windows and doors?

11. How many rolls of wall-paper 21 in. wide and 8 yds. to the single roll, will be required for a room 12 ft. long, 9 ft. wide, and 9 ft. high, deducting 4 strips for windows and doors? What will the cost be, at 15 cts. a roll? How many yards will be left over?

12. What will be the total cost of the following:—

8 bus.	15 lbs.	of	wheat	at	84 cts.	per bushel;
12 "	17 "	"	oats	"	48 "	"
10 "	12 "	"	barley	"	68 "	"
6 "	24 "	"	timothy seed	at	$1.50	per bushel;
8 "	25 "	"	flaxseed	"	2.00	"
3 "	30 "	"	clover seed	"	4.50	"
12 "	15 "	"	potatoes	"	48	"
8 "	14 "	"	corn	"	32	"
4 "	24 "	"	buckwheat	"	64	"
7 "	28 "	"	rye	"	60	"
5 "	15 "	"	peas	"	68	"
4 "	30 "	"	turnips	"	20	"
6 "	15 "	"	carrots	"	36	"
4 "	30 "	"	onions	"	80	"
4 "	15 "	"	beets	"	48	"

LVIII.

1. How many feet of lumber are there in a board 12 ft. long and 15 in. wide?

2. How many feet of lumber are there in a scantling 12 ft. long, 6 in. wide, and 4 in. thick?

3. A man bought 6 planks, each 12 ft. long, 18 in. wide, and 2 in. thick. How many feet of lumber did he buy?

4. A barn 60 ft. long and 40 ft. wide was floored with two-inch plank. How much did the lumber cost at $16 per M.?

5. Find the value of 1,000 pieces of scantling each 16 ft. long, 4 in. wide, and 3 in. thick, at $15 per M.?

6. Half-inch lumber costs the same price as inch lumber. A house 24 ft. long and 18 ft. wide was floored with boards 1½ in. thick. What was the cost at $20 per M.?

7. A room 15 ft. long, 9 ft. wide, and 10 ft. high has 3 windows, each 6 ft. by 4 ft., and 2 doors, each 7 ft. by 3 ft. How much would it cost to plaster it, at 28 cts. per square yard? (Note—In plastering rooms it is the custom to deduct half the area of windows and doors.)

8. A square of shingling is 100 square feet. How many squares of shingling are there in a piece of roof 40 ft. long and 25 ft. wide?

9. A certain roof is 30 feet long, and each side of it is 15 feet wide. How many squares of shingles will be required for it?

10. Four bunches of shingles cover a square. How many bunches will be required for a roof 40 feet long, each side being 15 feet wide? How much would the shingles cost at $1.25 per bunch?

11. A room 18 feet long, 12 feet wide and 9 feet high has 2 windows, each 6 feet by 4 feet, and 2 doors, each 7 feet by 3 feet. If a bundle of laths covers 5 square yards, how many bundles will be required for the room?

12. A sidewalk 6 feet wide and 1 mile in length was built of two-inch plank. How much did the lumber cost at $15 per M.?

ANSWERS.

Exercise 1.

1. 399 pages.
2. 99 runs.
3. 59 marbles.
4. 47 days.
5. 9 marbles.
6. 257 dollars.
7. 37 hens.
8. 77 dollars.
9. 132 nuts.
10. 7 white, 11 hens.
11. 106 steps.
12. 29 cents.

Exercise 2.

1. 58 dollars.
2. 13, 616 dollars.
3. 18 cents, 28 cts.
4. 301 miles.
5. 48 pupils.
6. 15 apples.
7. 34 plums.
8. 407 bu., 596 bbls.
9. 7 lbs., $2.84.
10. 16 pupils.
11. 35 sheep, $174.55.
12. $13.

Exercise 3.

1. 68 words.
2. 58.
3. 219 cents.
4. 90 cents.
5. 263 apples.
6. $6,242.
7. 640 plums.
8. 16 flowers.
9. 357 eggs.
10. 103 cents.
11. 23 marbles.
12. 25 pupils.

Exercise 4.

1. $358.85.
2. 46 cents.
3. 53 marbles, 106 marbles.
4. 100 cents.
5. $112.
6. 2,909 bushels.
7. 77 cents.
8. 119 cents.
9. 142 trees.
10. 13 doz., 201 cts.
11. 36 pupils.
12. 26 oranges.

Exercise 5.

1. 67 animals.
2. $198.
3. 44 quarts.
4. 38 candies.
5. 33 pencils.
6. 72 eggs.
7. $17,206.
8. 146 sheep, $1,021.
9. $120.
10. 521 cents.
11. 250 cents.
12. 86 runs.

Exercise 6.

1. 3 marbles.
2. 4 rabbits.
3. 15 cents.
4. 112 plums.
5. 13 apples.
6. 16 cents.
7. 7 cents.
8. 214.
9. 19 girls.
10. 15 cents.
11. 24 marbles.
12. 5 runs.

Exercise 7.

1. 23 pencils.
2. 6 pears.
3. 97 pages.
4. 42 cents.
5. 14 boys.
6. $702.
7. 3.
8. 61 cents.
9. 15 apples.
10. 69 eggs.
11. 40 cents.
12. 28 cents.

Exercise 8.

1. 35 marks.
2. 12 horses.
3. $349.
4. 51.
5. $8,902.
6. 9,801 candies.
7. 905 sheep.
8. $1,829.
9. 214.
10. 8 eggs.
11. 167 cents.
12. 347 cents.

Exercise 9.

1. 2,339 cents.
2. 303 cents.
3. 178.
4. 208 acres.
5. 23 cents
6. 167 cents.
7. 48.
8. 70.
9. 204 cents.
10. 10.
11. 11 nuts.
12. 2.

Exercise 10.

1. 715,927.
2. $1,360.
3. $22.
4. 10.
5. 82 cents.
6. 12.
7. 87 acres.
8. $345.
9. $1,984.
10. 35 marbles.
11. 68 cents.
12. $136.

Exercise 11.

1. Jane 14 apples and 4 pears, Ella 9 pears and 7 apples.
2. 50 cattle.
3. 7 cents.
4. 123 marbles.
5. 3,805.
6. 117 cents.
7. 49 apples.
8. 78 nuts.
9. 36 oranges.
10. 94 sheep.
11. 83 chickens, 88 hens.
12. 1,013 acres.

Exercise 12.

1. 129 marbles.
2. $185.
3. 32,299.
4. 250 cents.
5. 125 eggs.
6. $116.
7. Smith, $1,061.
8. 10 years.
9. 79 marbles.
10. 14 marbles.
11. $18.
12. 53,614.

Exercise 13.

1. 309.
2. 172 sheep.
3. 122 candies.
4. 100 cents.
5. $37,578.
6. 2,838 bushels.
7. 98 apples.
8. $995.
9. 2,616 bu., $2,546.
10. 456 eggs.
11. $9.94.
12. 348 cents.

Exercise 14.

1. $23,408.
2. John, $26.
3. 12,092.
4. $7.
5. 771 bushels.
6. $3,751.
7. 47 cows, $1,908.
8. $2.55.
9. 973 cents.
10. 91 cattle, $5,853.
11. 288 cents.
12. 72 marbles.

Exercise 15.

1. $1,330.
2. 4,901.
3. $4,125.
4. $4,873.
5. 13 cents.
6. 44 sheep.
7. $1,397.
8. 20 apples.
9. 67 red, 76 blue, 88 white.
10. 41.
11. 24 marbles.
12. 97.

Exercise 16.

1. 12,259.
2. $120.
3. 107 candies.
4. 1 marble.
5. $89.69.
6. Herbert, 2 marbles.
7. $19.
8. 3,596.
9. 66.
10. $819.
11. 14 marbles.
12. 77 cents.

Exercise 17.

1. 9,826.
2. $29.
3. 8,348.
4. $3,409.
5. 2,871.
6. 7 miles.
7. $2,858.
8. 167 sheep, $501.
9. 277 cents.
10. 44 miles.
11. 19,366.
12. $227.

Exercise 18.

1. 100 cents.
2. 27 cents.
3. $4.76.
4. 126 cents.
5. 4,014 cents.
6. 155 cents.
7. $12.
8. 6 cents.
9. 15,282 steps.
10. $210.
11. $52,384.
12. $573.

Exercise 19.

1. $16.65.
2. 472 apples.
3. $1.32.
4. $39.
5. 808.
6. 8 miles.
7. 1,536 acres.
8. $22.25.
9. $36.
10. $6.
11. $2.78.
12. $3,294.

Exercise 20.

1. $400.
2. 3,332.
3. 304 rows.
4. 918 days.
5. $11,024.
6. $460.
7. $5.59.
8. $7.83.
9. 111 candies.
10. 121,625 m. ; 4,375 miles.
11. $468.
12. $16.

Exercise 21.

1. $2,884,336.
2. $205.
3. $5.75.
4. $86,508.
5. 44,086 yards.
6. 244 cents.
7. $2.48.
8. $98.13.
9. $675.
10. $231.
11. 132,682 cents.
12. $638,848.

Exercise 22.

1. 178,239.
2. 402,540 lbs.
3. 621 miles.
4. 6,664 days.
5. 16.
6. $57.20.
7. 9,766 cents.
8. $300.
9. $2.
10. 16,016 days.
11. $51.
12. $45.

Exercise 23.

1. $12.
2. 10,368 yards.
3. 20 cents.
4. 16,200 miles.
5. $63,634,455.
6. 49 cents.
7. $5,081.
8. 7,182 yards
9. $12,759.
10. 63 cents.
11. $3.16.
12. 38 cents.

Exercise 24.

1. $700.80.
2. $3,128.16.
3. 64,960.
4. 1,824 days.
5. $417.
6. 9,648 cents.
7. Gain $25.
8. 83,772.
9. Gain $51.
10. $458.
11. $75.88.
12. $3,846.11.

Exercise 25.

1. $91.27,
2. $62.75.
3. 376 miles.
4. Lost $20.
5. $127.
6. Mary 107, candies.
7. 882,831,162.
8. Gain $824.
9. 16.
10. 128,000 ounces.
11. 7,479,612.
12. $7,877.

Exercise 26.

1. 18.
2. 25 cents.
3. 2 cents.
4. 12 apples.
5. 9 dresses.
6. 16 apples.
7. 157 bills.
8. 16 pears.
9. 20 apples.
10. 17 bushels.
11. 36,078 times.
12. 12 sheep.

Exercise 27.

1. $20.
2. $700,689.
3. 17 cents.
4. 21 pairs.
5. 144 dozen.
6. 100 ducks.
7. 16 days.
8. 6,079 pounds.
9. 2,709.
10. 658 times.
11. 388 yards.
12. 80 cents.

Exercise 28.

1. 348 ; 643 apples.
2. $36.
3. $54.60.
4. $1.29.
5. $21.
6. $16.
7. $391.
8. 3 cents.
9. 68 cows.
10. 82,351.
11. $1,933.75.
12. $16.

Exercise 29.

1. 9 months.
2. 66 cords.
3. 11,336.
4. $1,234.50.
5. 84 days.
6. 54,000 yards.
7. $360.84.
8. $1,659.
9. 10 seats.
10. $55.14.
11. 9.
12. 8 days.

Exercise 30.

1. 195 nuts.
2. 218 days.
3. 348 pounds.
4. 43.
5. 50 horses.
6. 42 bushels.
7. 1,800 bushels.
8. Ella, 60 ; Jane, 15.
9. 4 hours.
10. $6.
11. $82.
12. $20.

Exercise 31.

1. 7,064.
2. $372 ; $396.
3. 24 ; 28.
4. 34 cents.
5. $5.74.
6. $178.68.
7. $36.81.
8. 160 months.
9. 85 cents.
10. 8 tons.
11. $170.
12. 12 days.

Exercise 32.

1. $105.
2. 209.
3. $5.60.
4. 488,520.
5. $16.
6. $1,500.
7. 980 bags.
8. 7,296 miles.
9. $528.
10. 540 bushels;
11. $6.
12. 4,005 boards.

Exercise 33.

1. 36 sheep.
2. 12 persons.
3. 50 pupils.
4. 15 tons.
5. $9,361.
6. $3,306.
7. 4 barrels.
8. $13,259.
9. $33,067.
10. 114 bushels.
11. $1.25.
12. 14 cents.

Exercise 34.

1. 16 days.
2. 7 sheep.
3. 287.
4. 2,041 barrels.
5. $36.
6. $42.
7. 206 times.
8. 658 hours.
9. 901 candies.
10. 11 cents.
11. 12 cents.
12. 150 sheep.

Exercise 35.

1. 378.
2. $224.
3. 93 horses.
4. 32 children.
5. $75.
6. $28.
7. 28 dozen.
8. $224.
9. 9.
10. $4.25.
11. 82,644.
12. 3,888.

Exercise 36.

1. 8,700 lbs.
2. $1,260.
3. $2,641.
4. $6.
5. 35 cents.
6. $6.75.
7. 74 horses.
8. $54.
9. 41 cents.
10. 864 yards.
11. $6.04.
12. $2.61.

Exercise 37.

1. 7,471.
2. 94,864.
3. 4,903.
4. 288.
5. 241,876.
6. $114.
7. 10 men.
8. $24.
9. 156 horses.
10. $1.56.
11. 7 years.
12. 3 boys.

Exercise 38.

1. 18 hours.
2. 1,500 yards.
3. 17 sheep.
4. 11,956 lbs.
5. 1,000 seconds.
6. 60 cents.
7. $2,160.
8. 20 days.
9. $7.80.
10. $43.55.
11. 36 days.
12. 5 men.

Exercise 39.

1. $18.90.
2. 12½ days.
3. 70 men.
4. 720.
5. 20 cents.
6. 4,752 yds.
7. 1,280 rds.
8. 12 cords.
9. 61 gal.
10. $4.72.
11. $22.75.
12. $4,050.

Exercise 40.

1. $68.
2. 27 bu., 16 lb.
3. 2,772 yds.
4. 18 cents.
5. 10 yds.
6. 277 times.
7. 369.
8. 3 ozs.
9. $54.
10. 40.
11. 74 horses.
12. $98.

Exercise 41.

1. 250 lbs.
2. 1,600 doz.
3. $347.
4. 2,936 miles.
5. 400 coins.
6. 400.
7. 29 lbs. 4 ozs.; 30 lbs. 12 ozs.
8. $2,991.
9. 47 bags.
10. 846 yds.; 1,070 yds.
11. 24 cts.
12. 87,600 min.

Exercise 42.

1. 64 cts.
2. 3 years.
3. $1.20.
4. 80 cts.
5. 46 horses.
6. $4.
7. 27 cords.
8. $33.
9. 28 times.
10. 7 gals. 3 qts.; 9 gals. 3 qts.
11. $1.85; $1.65; $1.50
12. $267.

Exercise 43.

1. 34 times.
2. 264.
3. $11 ; $15 ; $8.
4. 64 bush.
5. 168 bush.
6. 12 ft.; 21 ft.; 9 ft.
7. $30.
8. $3 30.
9. $90.
10. 24 pupils.
11. $21.
12. 75 lbs. 10 ozs.; 89 lbs. 12 ozs.; 89 lbs. 10 ozs.

Exercise 44.

1. 16 gals.
2. 4 men.
3. $690.
4. 50 cts.
5. $34.40.
6. 1,258 lbs.; 1,365 lbs.; 1,221 lbs.; 1,305 lbs.;
7. 4 days.
8. 40 pairs.
9. $42.
10. 32 yards.
11. $3,520.
12. 120 animals.

Exercise 45.

1. $14,000.
2. $3.
3. $9.25 ; $18.50 ; $46.25.
4. $35.
5. 75 cents.
6. $4.34.
7. 10 men.
8. 10 days.
9. 4 lbs.; 1 lb.
10. $49.50.
11. 2 men.
12. 74 yards.

Exercise 46.

1. John, 24 cents ; William, 36 cents ; Henry 40 cents.
2. $7.
3. 2 gallons.
4. A, 45; B, 90; C, 270.
5. 21 gallons.
6. 28 hats.
7. June, $36.09.
8. $29.25.
9. $46.38.
10. 576 pints.
11. $5.70.
12. $187.20.

Exercise 47.

1. 480,000 ozs.
2. $15.
3. $210.
4. 320 ozs.
5. $5.
6. $180.
7. $7.04.
8. $2.25.
9. 29,920 steps.
10. 143,946 inches.
11. 104 miles, 174 rods.
12. 1,600 poles.

Exercise 48.

1. $3,080.
2. $117.60.
3. $43.75.
4. 156 boxes; $9.36.
5. 16,000 square rds.
6. 89,280 minutes.
7. 14,762 lots.
8. 5 ac. 87 sq. rds.
9. 9,240 feet.
10. 43,560 stones.
11. 800 sq rds.; 5 ac.
12. 22 cents.

Exercise 49.

1. 5.
2. 20 acres; $1,300.
3. $410.
4. $18.
5. 18 ac. 111 sq. rds. 9 sq. yds. 4 sq. ft. 72 sq. ins.
6. 9 mls. 27 rds. 4 yds. 1 ft. 6 in.
7. 500 chains.
8. 2 tons 1,176 lbs. 10 oz.
9. 222 bushels 1 pk. 1 gallon.
10. 117 miles 116 rods 2 yds. 1 foot 6 in.
11. 119 ac. 137 sq. rds.
12. 5,167 bu. 3 pk. 1 gal. 3 quarts.

Exercise 50.

1. 1,080 mi. 144 rd.
2. 1,152 cubic feet.
3. 640 parcels.
4. 39 bu. 1 pk. 1 gal.
5. 12 tons 322 lbs.
6. 2 bu. 1 pk. 1 gal.
7. 4 hr.; 9 mi. 220 rds.
8. 40 times.
9. 2,496 bricks.
10. 288 feet.
11. 4,675 gallons.
12. 36 boards.

Exercise 51.

1. 720 boards.
2. $15.40.
3. $1,367,964.
4. 38 gallons 3 qts.
5. $1.20.
6. 30 square yards.
7. 14,520 hills.
8. $71.28.
9. 8 minutes.
10. 6 miles.
11. 360 yards.
12. 3,630.

Exercise 52.

1. 37 mi. 155 rd. 4 yd.
2. 7 lbs. 8 oz.
3. 18 cents.
4. 40; 32; 12.
5. 15 yards.
6. $5.40.
7. 80 farms.
8. $31.65.
9. 9 tons.
10. 972 times.
11. $1.
12. $112.20.

Exercise 53.

1. 12 fields.
2. $33.93.
3. 102 acres, 150 square rods.
4. 12 bushels, 1 gal.; 14 bushels, 3 pecks, 1 gal.
5. 3 gallons.
6. 9 times.
7. $3,880.80.
8. $15.75.
9. 56 pounds.
10. 15 loads.
11. 48 minutes.
12. 68 fields.

Exercise 54.

1. $31.50
2. 20 rods.
3. 54 pounds.
4. 18 pieces, 4 yds.
5. 3,960 square ft.
6. 72 square feet.
7. 12 square yards.
8. $94.50.
9. 75 times.
10. $4.68.
11. $7.84.
12. $913.99½.

Exercise 55.

1. 46⅔ square yds.
2. 4 miles.
3. 1,320 pickets.
4. $25.20.
5. 168 bushels.
6. 3 strips, 4 strips.
7. $62.94.
8. 43 cents, 63 cts.
9. 6 strips, 18 in.
10. 30 minutes.
11. 6 feet.
12. 85 cents, 60 cts.

Exercise 56.

1. $17.82.
2. 14 feet.
3. 30 yds., $25.50.
4. 7,115,505.
5. 3,000 pounds.
6. 24 yards, 24 inches, $12.
7. White, $946; Martin, $1,204.
8. $36,992.
9. $6.50.
10. 3 feet, 2 inches.
11. The $75 wagon.
12. 1,800 gallons.

Exercise 57.

1. 54 pupils.
2. 98 barrels.
3. 7 strips, 3 in.
4. $12, $16, $20.
5. 35 strips.
6. £124 17s.
7. £624 5s. 3¾d.
8. 46,080 farthings.
9. $720.
10. 66 yards.
11. 8 rolls, $1.20, 4 yards.
12. $90.66.

Exercise 58.

1. 15 feet.
2. 24 feet.
3. 216 feet.
4. $76.80.
5. $240.
6. $17 28.
7. $17.36.
8. 10 squares
9. 9 squares.
10. 48 bunches, $60.
11. 10 bundles.
12. $950.40.

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